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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/027,444	12/21/2001	Robert G. McFarland	02CR026/KE	1569

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EXAMINER	
DYKE, KERRI M	

ART UNIT	PAPER NUMBER
2616	

DATE MAILED: 05/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/027,444	MCFARLAND ET AL.	
	Examiner	Art Unit	
	Kerri M. Dyke	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 February 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §.119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-19 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-4, 6, and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Kobata et al. (US 2002/0032884).

4. In regards to claim 1, Kobata discloses in a wireless network having a plurality of nodes configured to send and receive messages between each other, a method for determining whether a message send from a sending node to a receiving node has been successfully transmitted, comprising:

a. The sending node transmitting an identifying command to the receiving node that describes the sent message (paragraph 16 describes a signature file that is used to identify the transmission);

b. The receiving node comparing the description of the sent message with a received message that the receiving node has received (paragraph 16 discloses that the signature is compared to already received data);

c. The receiving node responding to the sending node, said response indicating the sending node the results of the comparison between the description of the sent message and the received message (paragraph 21 discloses responding with a request for retransmission if a portion is missing);

d. The sending node transmitting a portion of the sent message if the comparison between the received message and the description of the send message indicates that the receiving node has not yet received the portion of the sent message (paragraph 25 indicates that the sending node will restart transmission, i.e. resend the missing portion).

5. In regards to claim 2, Kobata discloses the method of claim 1, wherein the receiving node identifies a size of the portion of the sent message that has not been received. Block 32 of fig. 2 indicates that the receiver requests a transmission with a specific block size, blocksize, beginning at a specific position, pos.

6. In regards to claim 3, Kobata discloses the method of claim 2 wherein the receiving node identifies a location of the portion of the message that has not been received. Block 32 of fig. 2 indicates that the receiver requests a transmission with a specific block size, blocksize, beginning at a specific position, pos.

7. In regards to claim 4, Kobata discloses the method of claim 1 wherein the received message has a size, and further wherein the receiving node identifies the size of the received message. Paragraph 21 discloses that the retransmission must start from the end of the last block successfully received. The size of the intended message and the location of the start of the intended message are known. The receiver submits a request for retransmission indicating the

size of the missing portion and the location of the missing portion. Through simple subtraction the size of the received portion is known.

8. In regards to claim 6, Kobata discloses the method of claim 1, wherein the description of the sent message includes at least a name of the send message and a size of the sent message. Paragraph 16 discloses the description of the message includes the name, size, date, and checksum.

9. In regards to claim 7, Kobata discloses the method of claim 6, wherein the description of the send message further includes at least one of a time stamp, a checksum related to the sent message, and a destination address. Paragraph 16 discloses the description of the message includes the name, size, date (time stamp), and checksum. Paragraph 16 further discloses that the file is sent to a destination and it therefore must include the address of the destination in order to ensure proper reception by the intended recipient.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kobata et al. (US 2002/0032884) in view of Rondeau (US 5,734,643; cited in previous action).

12. In regards to claim 5, Muramatsu discloses the method of claim 1, but not further including re-transmitting the sent message to the receiving node if a predetermined time elapses before the response is received by the sending node.

Rondeau discloses a time-out and resend feature if a response is not received in column 2 lines 20-24.

It would have been obvious to one of ordinary skill in the art to time-out and resend data if a response is not received within a predetermined time period because doing so ensures the message is received at the end node, as taught by Rondeau in column 2 lines 14-24.

13. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kobata et al. (US 2002/0032884) in view of Miller (US 6,567,395; cited in previous action).

14. In regards to claim 8, Kobata discloses the method of claim 1, but not wherein the transmissions between the first node and the second node are accomplished over a frequency in the HF spectrum.

Miller discloses a wireless HF network in column 1 lines 38-39.

It would have been obvious to one of ordinary skill in the art to use the method for efficiently resending portions of a message that have encountered interference, as taught by Kobata, within a HF network because HF networks are susceptible to interference, as taught by Miller in column 2 lines 10-16.

15. Claims 9-12, 14, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobata et al. (US 2002/0032884) in view of Miller (US 6,567,395) further in view of Smith et al. (US 4,553,263).

16. In regards to claim 9, Kobata discloses a method of determining if a message has been successfully transmitted from a first node in a wireless communications network to a second node in the network, the method comprising:

e. Sending information about the transmitted message to the second node, the information including at least a name of the transmitted message and a size of the transmitted message (paragraph 16 describes a signature file that is used to identify the transmission using the name, size, date, and checksum);

f. Comparing the send information to a received message that was received by the second node (paragraph 16 discloses that the signature is compared to already received data);

g. Informing the first node of a portion of the transmitted message that was transmitted by the first node but not received by the second node (paragraph 21 discloses responding with a request for retransmission if a portion is missing);

h. Transmitting to the second node said portion of the message that was transmitted by the first node but not received by the second node (paragraph 25 indicates that the sending node will restart transmission, i.e. resend the missing portion).

Kobata does not disclose a single channel HF communications network.

Miller discloses a wireless HF network in column 1 lines 38-39.

It would have been obvious to one of ordinary skill in the art to use the method for efficiently resending portions of a message that have encountered interference, as taught by Kobata, within a HF network because HF networks are susceptible to interference, as taught by Miller in column 2 lines 10-16.

Smith discloses a single channel network in column 1 lines 11-17.

It would have been obvious to one of ordinary skill in the art to implement the method taught by Kobata in a single channel network. Smith discloses in column 1 lines 11-17 that a single channel network allows each repeater to cover a large geographic area. Smith also discloses in column 1 lines 34-36 that a single channel network can become crowded. Implementing the method of Kobata within a single channel network would have helped to ease network congestion because a transmission does not have to start over from the beginning, as stated at the end of paragraph 9, and therefore after an interruption the network resources can be more quickly relinquished for use by another user.

17. Claim 10 is rejected upon the same grounds as claim 2.

18. Claim 11 is rejected upon the same grounds as claim 4.

19. Claim 12 is rejected upon the same grounds as claim 3.

20. Claim 14 is rejected upon the same grounds as claim 7.

21. Claim 19 is rejected upon the same grounds as claim 9.

22. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kobata et al. (US 2002/0032884) in view of Miller (US 6,567,395) further in view of Smith et al. (US 4,553,263) further in view of Rondeau (US 5,734,643).

23. In regards to claim 13, Kobata, Miller, and Smith disclose the method of claim 9, but not further including re-transmitting the transmitted message if a predetermined time elapses before the first node is informed of a portion of the transmitted message that not received by the second node.

Rondeau discloses a time-out and resend feature if a response is not received in column 2 lines 20-24.

It would have been obvious to one of ordinary skill in the art to time-out and resend data if a response is not received within a predetermined time period because doing so ensures the message is received at the end node, as taught by Rondeau in column 2 lines 14-24.

24. Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobata et al. (US 2002/0032884) in view of Smith et al. (US 4,553,263).

25. In regards to claim 15, Kobata discloses a wireless communications network comprising:

i. A first node and a second node, the first node configured to send to the second node a message over the single channel and to transmit an inquiry command that communicates information regarding the send message, the second node configured to determine, using the information in the inquiry command, whether the sent message was correctly received paragraph 16 describes a signature file that is used to identify the transmission and determine if it was correctly received);

j. Wherein the second node transmits response information to the first node, the response information indicating whether a portion of the send message was not received by the second node (paragraph 21 discloses responding with a request for retransmission if a portion is missing); and

k. Wherein the first node is configured to retransmit the portion of the sent message that was not received by the second node (paragraph 25 indicates that the sending node will restart transmission, i.e. resend the missing portion).

Kobata does not disclose a single-channel communications network.

Miller discloses a wireless HF network in column 1 lines 38-39.

It would have been obvious to one of ordinary skill in the art to use the method for efficiently resending portions of a message that have encountered interference, as taught by Kobata, within a HF network because HF networks are susceptible to interference, as taught by Miller in column 2 lines 10-16.

Claims 16 and 17 are rejected upon the same grounds as claims 2 and 3 respectively.

26. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kobata et al. (US 2002/0032884) in view of Smith et al. (US 4,553,263) further in view of Rondeau (US 5,734,643).

27. In regards to claim 18, Kobata and Smith disclose the method of claim 15, but not wherein the first node is configured to re-send the sent message if a predetermined time elapses before the response message is received by the first node.

Rondeau discloses a time-out and resend feature if a response is not received in column 2 lines 20-24.

It would have been obvious to one of ordinary skill in the art to time-out and resend data if a response is not received within a predetermined time period because doing so ensures the message is received at the end node, as taught by Rondeau in column 2 lines 14-24.

Conclusion

28. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Monroe (US 5,912,902) discloses a method to avoid retransmitting previously transmitted but lost information.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kerri M. Dyke whose telephone number is (571) 272-0542. The examiner can normally be reached on Monday through Friday, 7:00 am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

kmd

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